



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,560	07/25/2003	Eric L. Andersen	200209473-1	5231

22879 7590 03/07/2007
HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

MORRISON, THOMAS A

ART UNIT	PAPER NUMBER
----------	--------------

3653

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
2 MONTHS	03/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

MAILED

MAR 07 2007

GROUP 3600

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/627,560
Filing Date: July 25, 2003
Appellant(s): ANDERSEN ET AL.

Petar Kraguljac
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 12/11/2006 appealing from the Office
action mailed 07/19/2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,042,791	Stemmler	08-1991
5,724,642	Cala	03-1998
6,308,948	Azumi	10-2001

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-8, 10-12 and 14-19 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,042,791 (Stemmle).

Regarding claim 1, Figs. 1 and 8 show a media handling system for an image forming device (including 10) configured with a primary media path (from 28 to 30 and then past 32, 39, 33 and into 34) and a duplex media path (from 39 to 42 in Figs. 1 and 8, and then past 40 in Fig. 8 and back up through 88 in Fig. 1 and into 28), the media handling system comprising:

a media feeder (including 84 and 83 in Fig. 8) positioned adjacent to one side of the image forming device (10) and configured to input print media (Fig. 8) into the duplex media path (i.e., input print media at the outlet of 40 in Fig. 8) of the image forming device (including 10), and the media feeder (including 84 and 83 in Fig. 8) being positioned to not be part of the duplex media path.

Art Unit: 3653

Regarding claim 2, Figs. 1 and 8 show that the duplex media path is a substantially horizontal media path. In as much as applicant does not set any specific angular tolerance limits for the term "substantially horizontal", it is the examiner's position that the duplex path of Stemmler is substantially horizontal.

Regarding claim 3, Figs. 1 and 8 show that the media feeder (including 84 and 83 in Fig. 8) is configured to automatically input non-imaged media into the duplex media path of the image forming device. See also column 9, line 68 to column 10, line 3.

Regarding claim 4, Figs. 1 and 8 show that the media feeder (including 84 and 83 in Fig. 8) includes a high-capacity media storage unit (83) to store a quantity of media.

Regarding claim 5, Figs. 1 and 8 show that the media feeder (including 84 and 83) is configured to be detachably mounted to the one side of the image forming device. More specifically, Figs. 1 and 8 show different units that can be added to the bottom of the image forming device (including 10). Fig. 1 shows a unit having only a duplex device (40) that can be added to the image forming device, while Fig. 8 shows an alternative unit with a duplex device (40) as well as a media feeder (including 84 and 83) that can be added to the image forming device. As such, these different units can be attached and detached.

Art Unit: 3653

Regarding claim 6, Fig. 1 shows a media output unit (including 34) configured to be positioned adjacent to the one side of the image forming device (including 10) to receive media discharged from the image forming device.

Regarding claim 7, Figs. 1 and 8 show that the media feeder (including 84 and 83 in Fig. 8) and the media output unit (including 34) are configured to be vertically-stacked to reduce a footprint of the image forming device.

Regarding claim 8, Figs. 1 and 8 show that the media feeder (including 84 and 83 in Fig. 8) and the media output unit (including 34) are integral within a housing (i.e., the entire outer casing).

Regarding claim 10, Figs. 1 and 8 show a media handling apparatus for inputting non-imaged media (Fig. 8) into an image forming device (including 10) having a primary media path (from 28 to 30 and then past 32, 39, 33 and into 34) along which an image is formed on a print media, the handling apparatus comprising:

a return media path (from 39 to 42 in Figs. 1 and 8, and then past 40 in Fig. 8 and back up through 88 in Fig. 1 and into 28) configured to selectively receive imaged print media (31) from the primary media path and return the imaged media (31) to the primary media path for multiple imaging;

a media input unit (including 84 and 83 in Fig. 8) configured for attachment to one side of the image forming device (including 10) to input non-imaged media (Fig. 8) into the return media path of the image forming device (i.e., input print media at the outlet of 40 in Fig. 8), where the media input unit (including 84 and 83 in Fig. 8) is

Art Unit: 3653

positioned where the return media path does not return the imaged media (31) across the media input unit (including 84 and 83 in Fig. 8) during duplex printing; and

a media output unit (including 34 in Fig. 1) for receiving imaged media (31) discharged from the primary media path, the media output unit (including 34) being configured for attachment to the one side of the image-forming device (including 10) and stacked above of the media input unit (including 84 and 83 in Fig. 8).

Regarding claim 11, Figs. 1 and 8 show that the return media path is a substantially horizontal path. In as much as applicant does not set any specific angular tolerance limits for the term "substantially horizontal", it is the examiner's position that the duplex path of Stemmler is substantially horizontal.

Regarding claim 12, Figs. 1 and 8 show that the media input unit (including 84 and 83 in Fig. 8) further comprises a media storage unit (83) to store a quantity of non-imaged media.

Regarding claim 14, Figs. 1 and 8 show that the media feeder (including 84 and 83) is configured to be detachably mounted to the one side of the image forming device. More specifically, Figs. 1 and 8 show different units that can be added to the bottom of the image forming device (including 10). Fig. 1 shows a unit having only a duplex device (40) that can be added to the image forming device, while Fig. 8 shows an alternative unit having a duplex device (40) and a media feeder (including 84 and 83) that can be added to the image forming device. As such, these different units can be attached and detached.

Regarding claim 15, Figs. 1 and 8 show that the media input unit (including 84 and 83 in Fig. 8) and the media output unit (including 34 in Fig. 1) are integral within a common housing (i.e., the entire outer casing).

Regarding claim 16, Figs. 1 and 8 show an image forming apparatus comprising:

a housing (Fig. 1) having at least one wall;

an image forming unit (including 14) provided within the housing for forming an image onto print media;

a media storage unit (including 83 in Fig. 8) configured to store a supply of non-imaged print media;

a primary media path (from 28 to 30 and then past 32, 39, 33 and into 34) for carrying print media to the image forming unit (including 14) for imaging;

a duplex media path (from 39 to 42 in Figs. 1 and 8, and then past 40 in Fig. 8 and back up through 88 in Fig. 1 and into 28) configured to receive imaged print media from the primary media path and return the imaged print media to the primary media path for duplex imaging where the returned imaged media is not returned to the media storage unit (including 83 in Fig. 8) during the duplex imaging; and

the duplex media path (from 39 to 42 in Figs. 1 and 8, and then past 40 in Fig. 8 and back up through 88 in Fig. 1 and into 28) being configured to receive non-imaged print media (media in Fig. 8) from the media storage unit (including 83 in Fig. 8) and to input the non-imaged print media to the primary media path for imaging.

Regarding claim 17, Fig. 1 shows a media output unit (including 34) positioned to receive imaged print media discharged from the primary media path where the media storage unit (including 83 in Fig. 8) and the media output unit (including 34) are stacked to reduce a footprint of the image forming apparatus.

Regarding claim 18, Figs. 1 and 8 show a media feeder (84) to feed the non-imaged print media from the media storage unit (including 83 in Fig. 8) to the duplex media path.

Regarding claim 19, Figs. 1 and 8 show that the media storage unit (including 83 in Fig. 8) and the media output unit (including 34) are contained within a common housing (i.e., the entire outer casing).

2. Claim 21 is rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 5,042,791 (Stemmler) or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 5,042,791 (Stemmler) in view of U.S. Patent No. 5,724,642 (Cala).

Regarding claim 21, Fig. 1 of Stemmler shows a gate (39) that determines whether print media is inputted into the primary media path (including 33) or the duplex media path (including 42). Inherent in the operation of this gate is some sort of logic to determine whether print media is to be inputted into the primary media path or the duplex media path. Alternatively, the Cala patent discloses that it is well known to operate sheet deflecting fingers via logic (e.g., signals from a microprocessor) to direct sheets to different paths. See, e.g., gate 24 in Fig. 1, column 3, lines 8-25 and column 4, lines 4-8 of the Cala patent. It would have been obvious to one of ordinary skill in the

Art Unit: 3653

art at the time the invention was made to control the gate (39) of Stemmler via signals from a microprocessor (logic) because this is the way that gates (sheet deflecting fingers) are conventionally operated in the art, as taught by the Cala patent.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 9, 13 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,042,791 (Stemmler) as applied to claims 6, 10 and 16 above, and further in view of U.S. Patent No. 6,308,948 (Azumi). Regarding claims 9, 13 and 20, the Stemmler patent discloses all of the features of these claims, except for a media finishing device.

The Azumi patent discloses that it is well known to provide an output unit (20) with a stapler (including 21) to allow a plurality of sheet bundles to be formed in the output unit (20). See, e.g., Abstract. It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the output unit (including 34) of Stemmler with a stapler (media finishing device) to allow a plurality of sheet bundles to be formed, as taught by Azumi.

(10) Response to Argument

I. **Claims 1-8, 10-12 and 14-19 are unpatentable under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,042,791 (Stemmle).**

Independent Claim 1

Regarding claim 1, appellants allege that, "Stemmle fails to teach or suggest the claimed media feeder and claimed configuration with the duplex media path." In support of this allegation appellants argue, "Thus, the paper is not inputted to the duplex path of the inverter 40 but rather by-passes the inverter 40 and inputs paper into the 'processor portion' at rolls 88. Therefore, paper tray 83 does not input paper into a duplex paper path and fails to teach the limitations of claim 1."

Appellant's allegation that the duplex media path somehow ends at the inverter 40 is without merit. With appellant's interpretation of the duplex media path, the Stemmle apparatus is **inoperable**. More specifically, if the duplex path ends at the inverter 40, there is no way for the sheet to be returned along a path from the inverter 40 back toward the transfer station 29, where an image is placed on the opposite side of the sheet (i.e., **no way to complete the duplex print**).

Moreover, appellants cite column 7, lines 23-27 of Stemmle in support of the allegation that the duplex path ends at the inverter 40. Rather, this disclosure supports the proposition that the **duplex media path includes** the path portion (**processor portion**) located after the inverter 40. Column 7, lines 23-27 of Stemmle state that, "There are two pairs of rightward driving nip rolls 63, 64, 65 and 66 which drive the print substrate out of the inverter back to the processor portion of the printing machine to

complete the duplex print. (emphasis added). Thus, the referenced “processor portion” is a part of the duplex media path that is needed **to complete the duplex print.**

To further clarify, operation of the Stemmler apparatus is explained below. This apparatus has a simplex media path and a duplex media path. First, this apparatus uses a sheet separator segmented feed roll 27 to feed a top sheet from a stack into an entrance of the simplex path (above reference numeral 26), and then conveys the sheet past a registration pinch roll pair 28 to a transfer station 29, where an image is placed on a first side of the sheet. See Fig. 1 of Stemmler. Then, this apparatus conveys the sheet along the simplex path over to a decision gate 39, which either directs the sheet out of the simplex path through output rolls 33 to a sheet stacking tray 34, or alternatively, directs the sheet down into an entrance of the duplex media path. Thus, the sheet **enters the duplex media path** at the decision gate 39 and is conveyed along the duplex media path to output rolls 42. After this, the sheet continues along the duplex media path to a duplex path side shifting inverter 40, where the sheet is flipped over. Next, the sheet is conveyed out of the duplex path side shifting inverter 40 and continues along the duplex media path up to transport rolls 88. Then, the sheet is conveyed out of transport rolls 88 **to an area (above reference numeral 88) where the simplex and duplex paths intersect.** See sideways V-shaped portion above reference numeral 88. Finally, the sheet is conveyed past the registration pinch roll pair 28 back to the transfer station 29, where an image is placed on the opposite side of the sheet. In other words, Figs. 1 and 8 of Stemmler show that the duplex media path goes from 39 to 42 in Figs. 1 and 8, and then past 40 in Fig. 8 and back up through 88 in Fig.

Art Unit: 3653

1 and into 28 (i.e., above reference numeral 88), where the simplex and duplex paths intersect. Also, Fig. 8 shows a media feeder (including 83 and 84) that inputs print media into the part of the duplex media path located below the transport rollers 88. Thus, all of the limitations of claim 1 are met. Note: the transport rollers 88 are numbered in Fig. 1, but are not numbered in Fig. 8.

Independent Claim 10

Regarding claim 10, appellants allege, "As such, paper tray 83 fails to meet the claimed limitation of a media input unit to input non-imaged media into the return media path." In support of this allegation appellants argue that "paper tray 83 inputs paper into rollers 88, which are downstream from the duplex path formed by the inverter 40."

This allegation is without merit. With appellants' interpretation of the return media path, the Stemmle apparatus is **inoperable**. More specifically, if the return media path ends at the inverter 40, there is no way for a sheet (imaged print media) to be returned by the return media path back to the primary media path, as required by claim 10.

Claim 10 recites, "**a return media path configured to selectively receive imaged print media from the primary media path and return the imaged media to the primary media path** for multiple imaging; a media input unit configured for attachment to one side of the image forming device to input non-imaged media into the return media path of the image forming device..." (emphasis added).

Figs. 1 and 8 of Stemmle show a primary media path (from 28 to 30 and then past 32, 39, 33 and into 34) along which an image is formed on a print media (i.e.,

Art Unit: 3653

image formed at transfer station 29). Also, Figs. 1 and 8 show a return media path (from 39 to 42 in Figs. 1 and 8, and then past 40 in Fig. 8 and back up through 88 in Fig. 1 and into 28) configured to selectively receive imaged print media (31) from the primary media path and return the imaged media (31) to the primary media path for multiple imaging. **The return media path returns the imaged media (31) to the primary media path for multiple imaging at an area (above reference numeral 88) where the primary and return media paths intersect.** See sideways V-shaped portion above reference numeral 88 in Fig. 1. Accordingly, the return media path includes transport rollers 88, because the imaged print media must be conveyed past the transports rollers 88 to be returned to the primary media path. Also, Fig. 8 of Stemmler shows a media input unit (including 84 and 83 in Fig. 8) configured for attachment to one side of the image forming device (including 10) to input non-imaged media (Fig. 8) into the return media path of the image forming device (i.e., input print media at the outlet of 40 in Fig. 8 below the area where the primary and return media paths intersect).

In addition, appellants state that claim 10 recites, "where the media input unit is positioned where the return media path does not return the imaged media across the media input unit during duplex printing", and allege that "this claimed limitation is not anticipated and the rejection cannot stand for this additional reason." In support of this allegation appellants argue that, "the inverter 40 forms the duplex path that travels across the paper tray 83."

This allegation is without merit. Figs. 1 and 8 of U.S. Patent No. 5,042,791 (Stemmler) show a media input unit (including 83 and 84 in Fig. 8) positioned to the side

Art Unit: 3653

of a **curved return media path** that passes into and out of the inverter 40. The media input unit (including 83 and 84) inputs media into the return media path **from a side** of the return media path. This is **similar** to the arrangement shown in Fig. 2 of the instant application, in that Fig. 2 of the instant application shows a media feeder (225) that inputs media into a **curved return media path** (230) **from a side** of the return media path. Thus, in as much as Fig. 2 of the instant application shows a media input unit positioned where the return media path does not return the imaged media across the media input unit during duplex printing, so does U.S. Patent No. 5,042,791 (Stemmle). See Figs. 1 and 8 of Stemmle. More specifically, Figs. 1 and 8 of Stemmle show a media input unit (including 83 and 84) positioned where the return media path (from 39 to 42 in Figs. 1 and 8, and then past 40 in Fig. 8 and back up through 88 in Fig. 1 and into 28) does not return the imaged media across the media input unit (including 83 and 84) during duplex printing. Thus, Stemmle meets all of the limitations of claim 10.

Independent Claim 16

Regarding claim 16, appellants allege, "Thus, the duplex path of Stemmle fails to anticipate the claimed duplex media path configured to receive non-imaged print media from the media storage unit." This allegation is without merit. As explained above with regard to claim 1, the duplex media path goes from 39 to 42 in Figs. 1 and 8, and then past 40 in Fig. 8 and back up through **88** in Fig. 1 and into 28. Also, Figs. 1 and 8 of Stemmle show that the duplex media path is configured to receive non-imaged print media (media in Fig. 8) from the media storage unit (including 83 in Fig. 8). Also, the non-imaged print media is received from the media storage unit (including 83) in the

Art Unit: 3653

part of the duplex media path located **below** the **transport rollers 88**. Thus, all of the limitations of claim 16 are met.

II. Claims 21 is unpatentable under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,042,791 (Stemmle) or in the alternative, under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 5,042,791 (Stemmle) in view of U.S. Patent No. 5,724,642 (Cala).

Regarding claim 21, appellants allege that, "Stemmle fails to teach a duplex path configured to receive non-imaged print media from the media storage unit". Also, appellants allege that, "Cala fails to cure the shortcomings of Stemmle and the combination fails to establish a prima facie obviousness rejection." This allegation is without merit. Claim 21 depends from claim 16. As explained above with regard to claim 16, Stemmle discloses a duplex media path configured to receive non-imaged print media from the media storage unit, as claimed. Cala is relied upon in the alternative rejection under 35 U.S.C. 103 (a) to disclose logic, as set forth in claim 21.

III. Claims 9,13 and 20 are unpatentable under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 5,042,791 (Stemmle) as applied to claims 6, 10 and 16, and further in view of U.S. Patent No. 6,308,948 (Azumi).

Regarding claims 9, 13 and 20, appellants allege that, "Since Stemmle fails to teach or suggest the respective independent claims of claims 9, 13 and 20 as described above, the combined references fail to establish a prima facie obviousness rejection." This allegation is without merit. Stemmle discloses all of the elements of independent

Art Unit: 3653

claims 10 and 16, as explained above. Also, the Azumi patent discloses the additional features that render dependent claims 9, 13 and 20 unpatentable.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

TMorrison



Conferees:

Patrick Mackey



Meredith Petravick



PATRICK MACKEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600